

Special Issue on
**Recent Advances on Analysis Methods and Modelling
Approaches for Seismic Assessment and Design of
Infilled RC Buildings**

CALL FOR PAPERS

One major challenge of earthquake risk mitigation is the assessment of existing buildings that have not been designed according to modern design codes, as well as the development of effective strengthening techniques. The design of new building structures is also of paramount importance, since infills are still currently neglected (or a lot of information is missing) by most of the seismic codes. Special attention should be paid to RC frame structures with masonry infill panels, as proved by their poor performance in recent earthquakes. Accurate modelling strategies and appropriate seismic assessment methodologies are crucial to the understanding of the behavior of existing buildings, the development of efficient and appropriate mitigation measures for existing buildings, and the prevention of high levels of damages, casualties, and economic losses. The effect of the combined in-plane and out-of-plane behaviour interaction of the infill masonry walls in the RC structure seismic behaviour, the local shear interaction between the RC frame and the masonry infill, and the development of analytical formulations that could help design engineers are still open issues.

The focus of this Special Issue is on recent advances in analysis methods and modelling approaches for the seismic assessment of infilled RC buildings. Articles submitted to this Special Issue can also be concerned with the most significant recent developments in the topic of computational methods to simulate infilled RC structures seismic behaviour and their applications in structural and seismic engineering problems. Furthermore, experimental works in the field of as-built and/or retrofitted infilled RC frames are also part of the Special Issue topics.

We invite researchers to contribute original research articles, as well as review articles, that will stimulate the continuing research effort on applications of either computational tools or reliable methodologies in order to analyze infilled RC buildings and provide reliable assistance for future codes or guidelines.

Potential topics include but are not limited to the following:

- ▶ Seismic response of infilled RC structures
- ▶ Simplified and detailed modelling tools
- ▶ Experimental testing of infilled RC specimens
- ▶ Assessment/design for RC infilled buildings
- ▶ Comparison between seismic standards regarding infilled RC structures

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/ace/raamm/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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